

SECTION 4: GETTING STARTED

4.1 USER ACCOUNTS

DSRS user accounts are available for Government employees and contractor personnel currently supporting Government projects. Account information is required to:

- Connect to the DSRS server,
- Provide users with current database information, and
- Extract RAs.

Contact the DSRS staff at your local site to obtain a DSRS user account.

4.2 INSTALLATION

To install DSRS for X/Motif:

It is the UNIX system administrators responsibility to install the DSRS for X/Motif. The DSRS User Tool for X/Motif will be distributed on tape. The installation procedures essentially involve setting up the DSRS owner account, creating the required directory structures, unloading the software from the tape, installing the Minerva RDBMS, and then establishing and configuring user accounts.

The following information describes the steps necessary to load and install the DSRS software (after the appropriate COTS support software environment has been created).

Preparation. Before installation, the following must be determined:

- Who is to be the Sun System Administrator?**
An individual at each site must be assigned as the site's Sun System Administrator and adequately trained in UNIX and Sun-specific System Administrator functions.
- Where will the COTS software be loaded?** The directories in which the COTS software products will be installed will need to be determined before installation. Vendor's product documentation should be consulted for any required directory structures which must be put in place.

- c. **What are the passwords for the root and ORACLE accounts?** The site's Sun System Administrator will be responsible for assigning and maintaining all system level passwords.
- d. **Where will the DSRS be loaded?** The directory in which the DSRS will be installed will need to be determined before installation. The examples in this document use **/usr/DSRS** as the directory where the DSRS will be loaded.
- e. **Which tape drive will be used?** The tape drive that will be used to install the system must be accessible.
- f. **What will be the DSRS owner account?** The username for the DSRS owner account will need to be determined. The username for the DSRS owner account provided in the examples for this document is **dsrtest**.
- g. **What are the IP Address and Hostname?** The IP address and hostname for the local site will need to be determined.

Setup. The following steps are necessary before DSRS installation:

- a. Create an account for the DSRS owner.
- b. Create the directory where the distribution tape will be loaded. This directory is the DSRS owner home directory pathname.

mkdir /usr/DSRS

If the directory has already been created, the following error will occur and can be ignored.

mkdir: /usr/DSRS file exists

- c. Change ownership of the above directory to belong to the DSRS owner account.

chown dsrtest /usr/DSRS

- d. Create the **dsrsadmin** group. The **gid** field must be unique for each group on the node. The **gid** of the **dsrsadmin** group must be the same **gid** used when creating the DSRS owner account.
- e. Make the DSRS owner account a member of the **dsrsadmin** and **dba** groups.

Installation. This section explains how to read the DSRS software from the tape media to the target directory, and execute the script file to create the database.

- a. Log into the DSRS owner account created in the setup section. After you have logged in, you are automatically in the directory where you will read the DSRS distribution tape.

Login: dsrstest

- b. Change the password for the DSRS owner account. A password will need to be typed at the **New Password** prompt and again at the **Retype New Password** prompt.

passwd

- c. Insert the DSRS distribution tape into the tape drive.
- d. Read the tape into the target directory.

If loading the software onto Sun OS 4.1.3, type:

tar xvpf /dev/rst0 > tapelist.log

If loading the software onto a Solaris 2.3 system, type:

tar xvpf /dev/rmt/0>tapelist.log

The correct tape drive device information will need to be substituted for **/dev/rst0** or **dev/rmt/0** in the above commands. The screen output will be captured to the file tapelist.log.

- e. Create a symbolic link to the **/usr/DSRS** directory.

ln -s /usr/DSRS /dsrscm

To verify that the link has correct ownership and protections as listed below:

ls -al /dsrscm

file protections - lrwxrwxrwx
owner - root

Installation Procedures for Minerva MSQL RDBMS.

- a. The user must be a "supervisor" and must be in the **/usr** directory.
- b. Create the **/usr/local/Minerva** directory.

mkdir /usr/local/Minerva

- c. Change directory to **/usr/local/Minerva**

cd /usr/local/Minerva

- d. Extract the files from the **/dsrscm/utils/msql.tar** file.

tar -xvf /dsrscm/utils/msql.tar

- e. Start the **msql daemon**. The following line will start the **msql daemon** during the boot process when inserted into the **/etc/rc.local** file.

/usr/local/Minerva/bin/msqld &

The following line will be displayed and can be ignored:

*Couldn't open ACL file: No such file
or directory*

Post-Install Setup.

- a. Log into the root account or **su** to become superuser.
- b. Copy the dsrs resource file **/dsrscm/config/dsrs** to the **/usr/openwin/lib/app-defaults** directory, and the Motif apps-default directory.

```
cp /dsrscm/config/dsrs /usr/openwin/lib/app-  
defaults/dsrs  
cp /dsrscm/config/dsrs /usr/Motif/usr/lib/X11/app-  
defaults/dsrs
```

- c. Create a symbolic link to the **/dsrscm/bin/captive** file.

```
ln -s /dsrscm/bin/captive  
/bin/captive
```

To verify that the link has correct ownership and protections.

```
ls -al /bin/captive
```

```
file protections - lrwxrwxrwx  
owner - root
```

- d. Log out of the root account.

Establishing DSRS User Accounts. When creating each DSRS for X/Motif user account, you must define the necessary environment variables when initiating the account. This can be accomplished by creating **.login**, **.cshrc**, **.xinitrc**, **.mwmrc**, and **.Xdefaults** files. These files are provided with the installation and may be copied to every DSRS user's home directory.

```
cp /dsrscm/config/login ~username/.login  
cp /dsrscm/config/cshrc ~username/.cshrc  
cp /dsrscm/config/dsrs ~username/.Xdefaults  
cp /dsrscm/config/xinitrc ~username/.xinitrc  
cp /dsrscm/config/mwmrc ~username/.mwmrc  
chown username ~username/.login
```

```
chown username ~username/.cshrc  
chown username ~username/.Xdefaults  
chown username ~username/.xinitrc  
chown username ~username/.mwmrc
```

A local MySQL database must be created for each DSRS for X/Motif user using the *username* as the database identifier.

```
/usr/local/Minerva/bin/msqladmin create username
```

Also for each local MySQL database created with the **msqladmin** script, the following lines must be added to the **/usr/local/Minerva/msql.acl** file.

```
database =username  
read =username  
write =username  
host =*  
access =local, remote
```

SYSTEM OPERATION

Access Requirements. The following steps are required to access **DSRS for X/Motif** executable.

- a. **Terminal.** The **xterm** terminal type supports the **DSRS for X/Motif** application.
- b. **Accounts.** The user must be logged into a valid account on the local workstation and have a valid DSRS account.
- c. **Additional Requirements. DSRS for X/Motif** requires UNIX X/Motif-based terminal type setting.

The shell variable **TERM** must be defined as a supported terminal type.

To invoke the DSRS for X/Motif, enter the comand:

```
dsrs
```

The shell variable DISPLAY must be defined as the IP address of the display device. For example:

setenv DISPLAY <IP address>:0

Motif must be running X11R5 which is installed during the ICS OSF Motif installation.

Messages and Diagnostics. Below are listed potential problems that may occur when executing DSRS for X/Motif.

DSRS for X/Motif Problems

Problem	Description
<i>Unable to open the dsrs_client.log.</i>	You do not have the proper protection set for the file /var/adm/dsrs/dsrs_client.log.
<i>Unexpected colors or unusual looking screens are displayed.</i>	An .Xdefaults file must be created in the user's directory.
Unable to allocate fonts or colors.	An .Xdefaults file must be created with appropriate fonts and colors supported by the Xserver.
<i>Unknown terminal type.</i>	You must enter a supported terminal type.
<i>Warning: Couldn't open file xxx.uid-MrmNOT_FOUND.</i>	The variable UIDPATH has not been properly defined.

Outputs. This section list the output files generated by DSRS User Tool for X/Motif.

- a. **Sessions.** If the user saves their session, then a file is created that contains the current session information.
- b. **File Copy Extractions.** If the user performs a file copy extraction, then the RA files are downloaded to the current working directory. These files may

include source code, RA documentation, and test drivers. Filenames are determined by the RA ID and an extension indicative of the type of RA file. For example, a file with the extension **.abs** contains the abstract for the RA identified in the filename.

c. **Hard Copy and Tape Copy Extraction Requests.**

If a user requests a hard copy or tape copy extraction, then a file is created in the **/var/adm/dsrs** directory. This file includes information about the requested extraction with a file extension of **.ext**.

d. **Remote Extract.** If the user performs a remote extraction, then the system writes notification and error messages to the **dsrs_client.log**. This file is stored in the **/var/adm/dsrs**.

e. **Additional Files.** In some cases, if failures occur during extractions using FTP, directories containing RA files may be left in the **/tmp** directory. The **/var/adm/dsrs/pc_server.log** file contains messages generated by the **pc_server** and **pc_server.sol23** executables.

4.3 LOGIN

To start DSRS for X/Motif:

1. From the UNIX prompt on your workstation, enter **dsrs**.
2. The DSRS splash screen displays. Click the **Continue** command button to display the DSRS Main Window as shown in Figure 4-1.

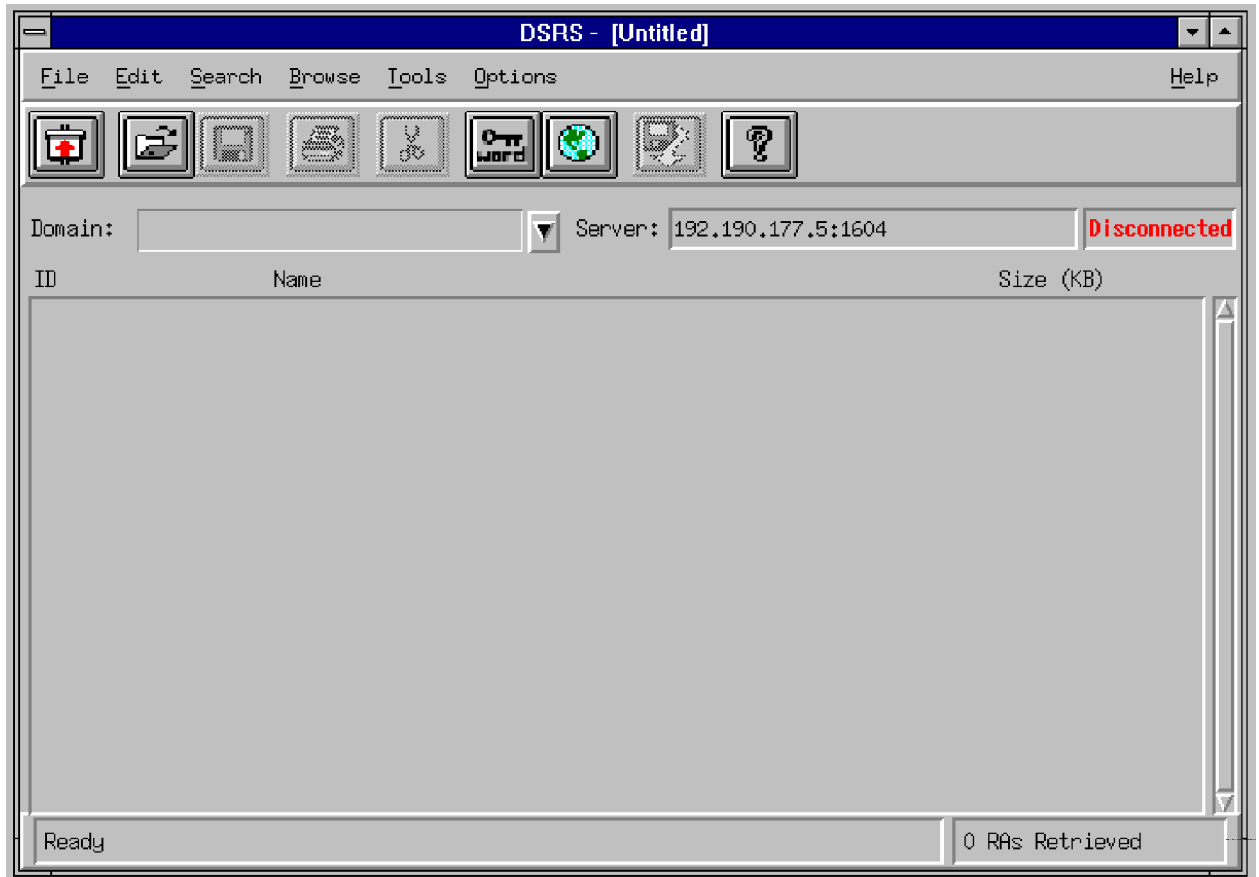


Figure 4-1. DSRS Main Window

To Enter Network Configuration:

The DSRS server name is listed in the **Server** field located below the button bar on the right side of the DSRS Window as shown in Figure 4-1. The server should be set to the name or Internet Protocol (IP) address for the DSRS host computer system. This DSRS server name and IP address are identified in the user information you received when your account was issued.

To enter the information:

1. Click **Options** from the menu bar.
2. Click **Network** from the pull-down menu as shown in Figure 4-2.

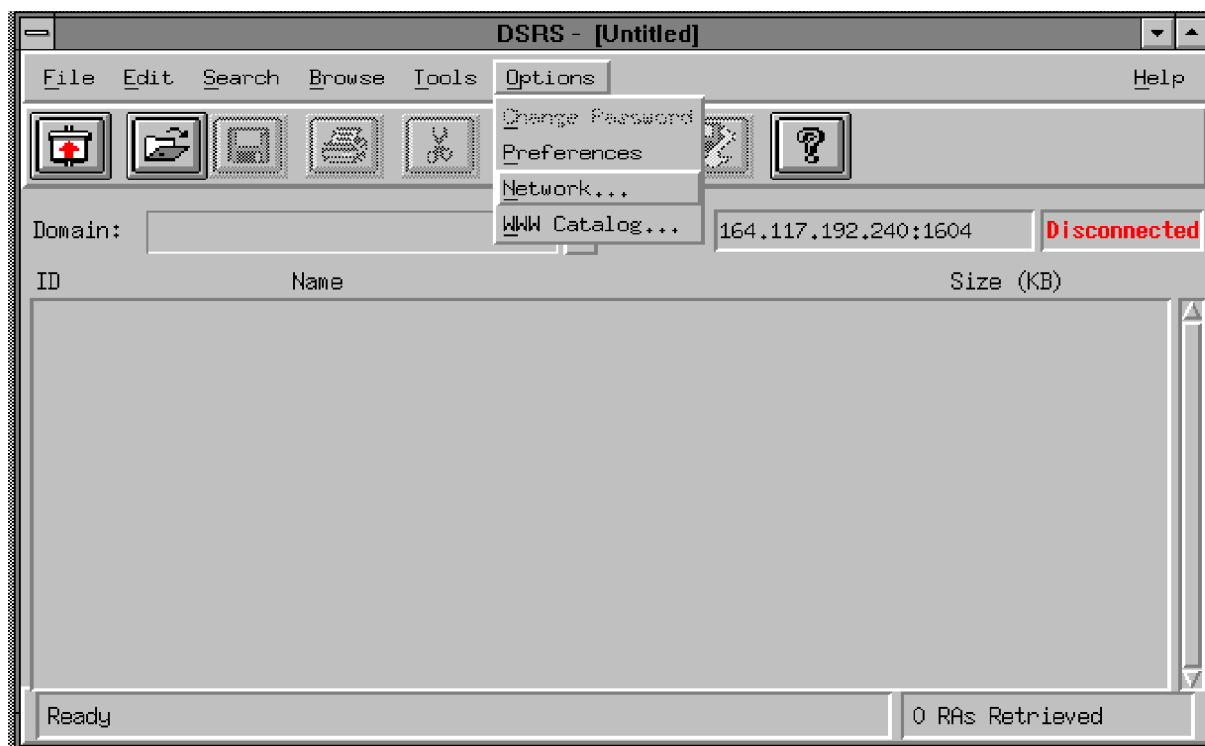


Figure 4-2. Options Pull-Down Menu

The system will display the **Network Configuration** dialog box as shown in Figure 4-3.

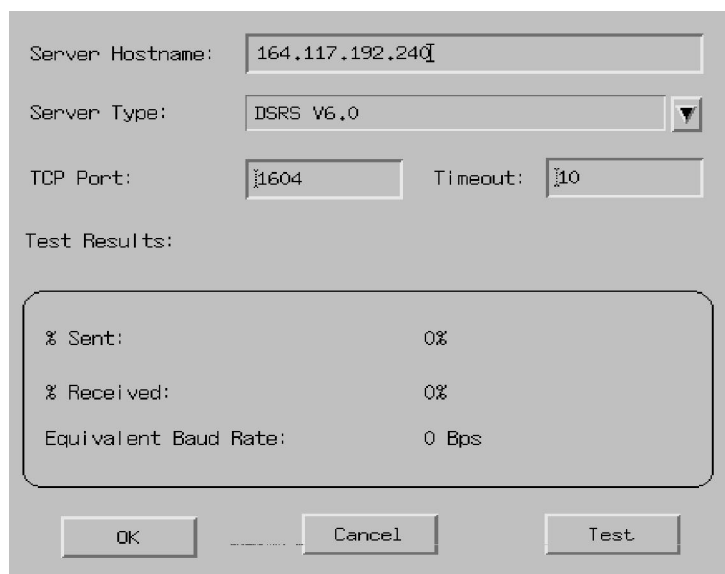


Figure 4-3. Network Configuration Dialog Box

3. Enter the information in the appropriate text boxes. The Server Hostname, Server Type and TCP Port Information must be set to values provided to you in the user information you received when your account was issued.
4. Click **OK**.

The network connection can be tested by clicking the **Test** button.

To Connect to the DSRS Server:

Once you have correctly entered the Network Configuration information, you can connect to the server and login to the DSRS using your User ID and Password.

From the DSRS window:

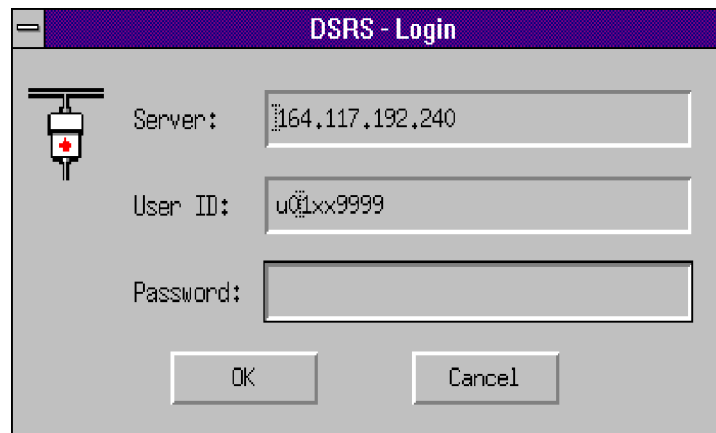


Figure 4-4. Login Screen

1. Click the **Connect to Server** button located on the button bar, or click **File** from the menu bar, and click **Connect** from the pull-down menu.



2. The Login screen will display, prompting for a **User ID** and **Password** as shown in Figure 4-4.
3. Enter your assigned **User ID** and **Password**. Use the mouse to move between fields.

For security purposes, your password will not be echoed as you type.

4. Click **OK** to continue the login process or **Cancel** to remain disconnected from the DSRS server.

If you entered your **User ID** or **Password** incorrectly the DSRS will display an error message. To clear the error message, click **OK** and repeat the steps to login.


WARNING: Login attempts are limited by the DSRS to reduce the risk of unauthorized access. The number of login attempts for the DSRS is determined and set by the DSRS Staff. If the user tries to login unsuccessfully beyond the limit of the login threshold, the **account will be disabled**. If your account is disabled, contact the DSRS Staff to have your account reset.

5. When you successfully login to the system, a dialog box displays with the message **Login successful**. The message **Connected** will also display in the **Server** field.
6. Click **OK** to continue.

NOTE: After your initial login you will be required to change your password. Refer to Section 5.7.1 of this manual for instructions.

4.4 LOGOUT

To Disconnect from the DSRS Server:

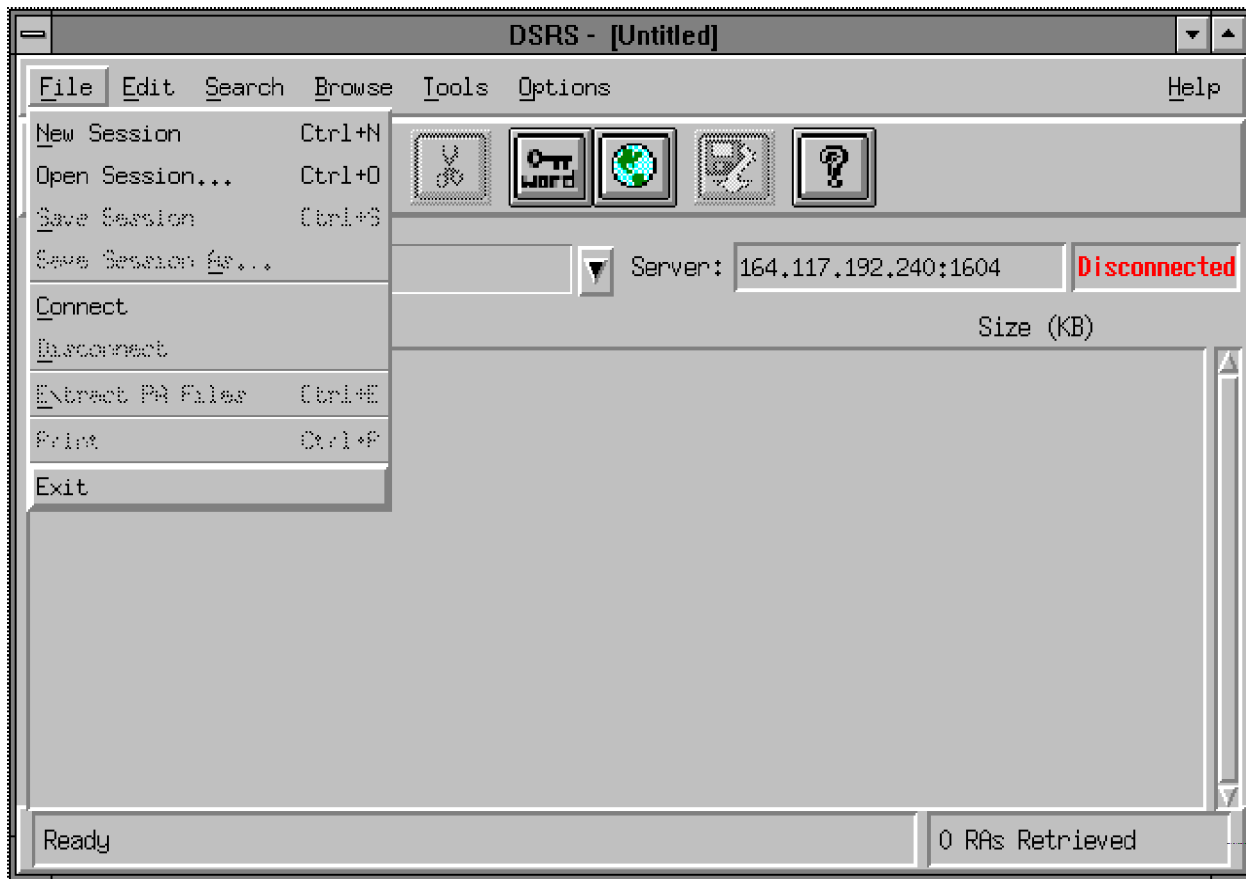
1. Click **Disconnect** from the **File** pull-down menu or the **Disconnect from Server** icon. The Disconnect dialog box is displayed and asks, “**Do you really wish to disconnect from the server?**” 
2. Click **Yes** to disconnect from the DSRS server or **No** to remain connected. If you select **Yes**, the message **Disconnected** will display in the **Server** field in the DSRS window.

To Exit from the DSRS:

1. Click **File** on the menu bar.
2. Click **Exit** on the pull-down menu as shown in Figure 4-5.

Exiting the DSRS can be performed whether or not you are connected to the server.

3. If there is an unsaved RA list in the workspace, the DSRS displays a dialog box that asks, “**Would you like to save this session?**” Click **Yes** to save the session or **No** to exit without saving the session.
4. To remain in the DSRS for Windows, click **Cancel**.

**Figure 4-5. Exiting the DSRS**